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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,110	02/03/2004	Michael A. Yurochko	21495-08115	4877

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EXAMINER
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LEE, KYUNG S

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/772,110	<b>Applicant(s)</b> YUROCHKO ET AL. 	
	<b>Examiner</b> Richard K. Lee	<b>Art Unit</b> 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0306</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 9-11, 17-19, 24-26, 31-33, and 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Chou (US Pat. 6,166,342).

Chou '342 teaches a keypad comprising:

a plurality of keys (abstract);

a flexible carrier 42 (fig. 4) having openings 45 between keys; and

the openings not contacting the keys.

Regarding claim 3, please see the abstract.

Regarding claim 4, fig. 6 shows the attachment means for the keys.

Regarding claims 9-11 and 31-33, openings 45 of Chou divides the flexible carrier into multiple parts (taking each key as an individual).

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Regarding claims 17 and 39-40, the openings in the carrier occur in accordance with locations of the plurality of keys.

Regarding claims 19,23 and 41, the space bar and/or F and J are tactilely differentiated from the other keys. The F and/or J keys have a peak thereon.

Regarding claim 25, snap dome is 2 in fig. 3.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-8,15-16,20-22, 27-30, 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou '342 in view of Mitamura et al. (US Pat. 5,357,065 and in further view of Soloway (US Pat. 4,892,981).

Chou teaches the claimed invention except for disclosing various possible shapes for the openings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have employed any one of known shaped

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openings, since mere selection of shaped openings would have been within the level of ordinary skill in the art.

Mitamura (fig. 3) and Soloway disclose oval and round shaped openings, respectively.

Chou teaches the claimed invention except for disclosing various possible key shapes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have employed any one of known key shapes, since mere selection of key shapes would have been within the level of ordinary skill in the art.

Regarding claims 8 and 30, Mitamura discloses an oval and semicircular openings, in fig. 3.

Regarding claims 15 and 37, Mitamura discloses cutouts in an outer perimeter of the carrier, in fig. 3.

Regarding claims 16 and 38, the cutouts in the outer perimeter occur in accordance with locations of the plurality of keys.

Regarding claims 20-22, Mitamura discloses a domed key and Soloway discloses the inverted dimple or bowl shaped key.

Regarding claims 27-29, please see the discussion above regarding the shapes for the opening.

5. Claims 12-14 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US Pat. 6,198,053).

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Chou '342 teaches the claimed invention except for the multiple parts having zigzag shaped edge. Chou '053 teaches the multiple parts having a zigzag shaped edge (fig. 2A), separated by opening 33 for the purpose of providing an input device comfortable to the user. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the flexible carrier of Chou '342 with openings to form a zig-zag shaped edge as taught by Chou '053, since the zig-zag shaped edge provides the input device of Chou '342 with improved comfort to the user.

Regarding claims 13 and 35, please see fig. 2B of Chou '053.

Regarding claims 14 and 36, please see fig. 1 of Chou '053.

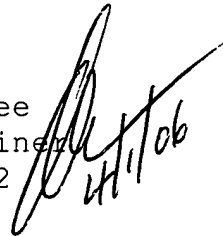
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard K. Lee whose telephone number is (571) 272-1994. The examiner can normally be reached on Mon-Tue & Thu-Fri 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard K. Lee  
Primary Examiner  
Art Unit 2832

A handwritten signature in black ink, appearing to read 'R. Lee', with a date '4/11/06' written below it.